

CLAIMS

1. (Previously Presented) A method for providing product information comprising the steps of:

establishing a local reference frame which defines a space including a product identifier corresponding to the product information and a portable display device, wherein the space is three dimensional;

receiving a request for product information corresponding to the product identifier from the portable display device;

determining a position and an orientation in the three dimensional space of the portable display device in relation to the local reference frame;

requesting via the portable display device the product information, wherein the product identifier corresponding to the product information is selected according to the position and the orientation in the three dimensional space of the portable display device in relation to the local reference frame; and

providing the product information via the portable display device.

2. (Original) The method of claim 1, further comprising the step receiving an order for a product corresponding to the product identifier from the portable display device.

3. (Original) The method of claim 1, further comprising the step of receiving a bid for a product corresponding to the product identifier from the portable display device.

4. (Original) The method of claim 1, further comprising the step of adding a product corresponding to the product identifier to a user shopping list using the portable display device.

5. (Original) The method of claim 1, further comprising the step of providing a menu for distinguishing a plurality of products in the space via the portable display device.

6. (Original) The method of claim 1, further comprising the step of redirecting a user toward an alternative product using the portable display device.

7. (Original) The method of claim 1, further comprising the steps of:
determining the orientation of the portable display device; and
selecting between the object and another proximate object on the basis of the orientation of the portable display device.

8. (Original) The method of claim 1, wherein the local reference frame is established using an active beacon.

9. (Previously Presented) The method of claim 8, further comprising the step of determining a position of the portable display device by comparing one of signal strengths of at least two beacons, a signal transmission time from each of at least two beacons, and an angle between at least two beacons, and the orientation is determined in three rotation angles.

10. (Original) The method of claim 1, wherein the local reference frame is established using passive environmental markings.

11. (Original) The method of claim 10, further comprising the step of determining a position of the portable display device relative to at least one environmental marking.

12. (Original) The method of claim 10, further comprising the step of determining a position of the portable display device relative to an angle between at least two environmental markings.

13. (Original) The method of claim 1, further comprising the step of retrieving the product information from a database stored in the portable display device.

14. (Original) The method of claim 1, wherein the local reference frame is established relative to the portable display device and moves with the portable display device.

15. (Previously Presented) A system for providing a user access to information comprising:

a portable display device within a local reference frame including an object, wherein the local reference frame is a three dimensional space;

a plurality of positional sensors;

a user selectable trigger of the portable display device for triggering a correlation means, the correlation means for determining the object according to a known position of the object

within the three dimensional space, and a position and an orientation of the portable display device within the three dimensional space; and

a database for providing, via the portable display device, information corresponding to the object.

16. (Original) The system of claim 15, further comprising a plurality of active beacons defining the local reference frame, wherein the positional sensors are part of the portable display device.

17. (Original) The system of claim 15, wherein the correlation means determines the position of the portable display device based on a signal strength of at least one active beacon, wherein the signal strength is determined by the positional sensors.

18. (Previously Presented) The system of claim 15, where the correlation means determines the position of the portable display device is based on a signal transmission times from each of at least two active beacons, and the orientation is determined in three rotation angles.

19. (Original) The system of claim 15, further comprising a wireless communication link between the portable display device and a database of product information.

20. (Previously Presented) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for providing product information, the method steps comprising:

establishing a local reference frame which defines a space including a product identifier corresponding to the product information and a portable display device, wherein the space is three dimensional;

receiving a request for product information corresponding to the product identifier from the portable display device;

determining a position and an orientation in the three dimensional space of the portable display device in relation to the local reference frame;

requesting via the portable display device the product information, wherein the product identifier corresponding to the product information is selected according to the position and the orientation in the three dimensional space of the portable display device in relation to the local reference frame; and

providing the product information via the portable display device.